

**Customer No. 27061**  
Confirmation No. 2216

Patent  
Attorney Docket No. **Old:** GEM-30834  
**New:** GEMS8081.022

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Kennedy, Ronald G.  
Serial No. : 09/474,418  
Filed : December 29, 1999  
For : System and Method For Remote Servicing of In-Field Product  
Group Art No. : 2143  
Examiner : Vaughn, W.

---

**CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10**

I hereby certify that, on the date shown below, this correspondence is being:

**Mailing**

☐ deposited with the US Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

**37 CFR 1.8(a)**

**37 CFR 1.10**

☐ with sufficient postage as first class mail ☐ As "Express Mail Post Office to Addressee" Mailing Label No.

**Transmission**

☐ transmitted by facsimile to Fax No.: 571-273-8300 addressed to Examiner Vaughn, W. at the Patent and Trademark Office.

☒ transmitted by EFS-WEB addressed to Examiner Vaughn, W. at the Patent and Trademark Office.

Date: December 20, 2006

/Robyn L. Templin/  
Signature

---

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF**  
**MAILED NOVEMBER 20, 2006**

Dear Sir:

Responsive to the Notice of Non-Compliant Appeal Brief mailed November 20, 2006,  
Applicant requests consideration of the remarks set forth below:

**REMARKS**

In the Notification of Non-Compliant Appeal Brief, the Examiner stated that the Appeal Brief filed on March 13, 2006 was non-compliant because the Summary of Claimed Subject Matter is deficient in that it does not contain a concise explanation of each independent claim (1, 10, and 21) involved in the appeal. See Notification of Non-Compliant Appeal Brief, November 20, 2006. In response, Appellant has amended section, **5. Summary of the Claimed Subject Matter**, to include identification of all the independent claims and the summaries thereof. Please find attached an amended Appeal Brief incorporating the amendments identified above.

Respectfully submitted,

/Timothy J. Ziolkowski/

Timothy J. Ziolkowski  
Registration No. 38,368  
Phone 262-268-8181  
tjz@zpspatents.com

Respectfully submitted,

/Kevin R. Rosin/

Kevin R. Rosin  
Registration No. 55,584  
Phone 262-268-8100 ext. 15  
krr@zpspatents.com

Dated: December 20, 2006  
Attorney Docket No.: GEMS8081.022

**P.O. ADDRESS:**

Ziolkowski Patent Solutions Group, SC  
136 South Wisconsin Street  
Port Washington, WI 53074  
262-268-8100

**Customer No. 27061**

Patent  
Attorney Docket No. **Old:** GEM-30834  
**New:** GEMS8081.022

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Kennedy, Ronald G.  
Serial No. : 09/474,418  
Filed : December 29, 1999  
For : System and Method For Remote Servicing of In-Field Product  
Group Art No. : 2143  
Examiner : Vaughn, W.

---

**CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10**

I hereby certify that, on the date shown below, this correspondence is being:

**Mailing**

☐ deposited with the US Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

**37 CFR 1.8(a)**

**37 CFR 1.10**

☐ with sufficient postage as first class mail ☐ As "Express Mail Post Office to Addressee" Mailing Label No.

**Transmission**

☐ transmitted by facsimile to Fax No.: 571-273-8300 addressed to Examiner Vaughn, W. at the Patent and Trademark Office.

☒ transmitted by EFS-WEB addressed to Examiner Vaughn, W. at the Patent and Trademark Office.

Date: December 20, 2006

/Robyn L. Templin/  
Signature

---

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF PURSUANT TO 37 C.F.R. §§1.191 AND 1.192**

Dear Sir:

This Appeal Brief is being filed in furtherance of the Notice of Appeal filed on January 5, 2006 and the Panel Decision mailed February 13, 2006.

1. **REAL PARTY IN INTEREST:**

The real party in interest is GE Medical Technology Services, Inc., the Assignee of the above-referenced application by virtue of the Assignment to GE Medical Technology Services, Inc., recorded on January 22, 2001, recorded at reel 011499, frame 0198.

2. **RELATED APPEALS AND INTERFERENCES:**

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal. GE Medical Technology Services, Inc., the Assignee of the above-referenced Application, as evidenced by the documents mentioned above, will be directly affected by the Board's decision in the pending appeal.

3. **STATUS OF THE CLAIMS:**

Claims 1-24 are currently pending, and claims 1-24 are currently under final rejection and, thus, are the subject of this appeal.

4. **STATUS OF AMENDMENTS:**

Appellant has submitted no amendments subsequent to the final Office Action of October 6, 2005.

5. **SUMMARY OF THE CLAIMED SUBJECT MATTER:**

An in-field product remote servicing communication system (10) is set forth in claim 1 that includes at least one on-line center (16) having access to service software at a centralized facility so as to remotely service in-field product (28, 30, 32, 34). Specification, pg. 4, lns. 1-4. The system includes an in-field product (28, 30, 32, 34) at a customer site (12, 14) that is not readily capable of direct communication with the on-line center (16). Id., lns. 4-5. At least one portable service interface (22, 22a) is operable with the in-field product (28, 30, 32, 34) at the customer site (12, 14) and has software for communication with the on-line center (16). Id., lns. 5-7. The system (10) includes a first communications link (15, 19, 72) connecting the portable service interface (22, 22a) to the on-line center (16) and a second communications link (13, 17) connecting the portable service interface (22, 22a) with the in-field product (28, 30, 32, 34) to complete a connection between the in-field product (28, 30, 32, 34) and the on-line center (16) through the portable service interface (22, 22a). Id., lns. 7-11.

Another aspect of the claimed invention is set forth in claim 10. Claim 10 discloses a method of providing remote service communication between an on-line center (16) and an in-field product (28, 30, 32, 34) at a customer site (12, 14) wherein the in-field product (28, 30, 32, 34) is not readily capable of direct communication with the on-line center (16). Id., lns. 12-15. The method includes loading on-line center connectivity software on a portable service interface (22, 22a) and connecting the portable service

interface (22, 22a) to the in-field product (28, 30, 32, 34). *Id.*, Ins. 15-17. After such a connection is established, the method includes electronically connecting (15, 19) the on-line center (16) with the portable service interface (22, 22a) and accessing data (13, 17) from the in-field product (28, 30, 32, 34) with the portable service interface (22, 22a), such that interfacing between the on-line center (16) and the in-field product (28, 30, 32, 34) with the portable service interface (22, 22a) begins. *Id.*, Ins. 17-20.

A further aspect of the claimed invention is set forth in claim 21 and discloses a method of servicing (10) an in-field product (28, 30, 32, 34) that is not readily capable of direct communication with a remote on-line center (16) which includes providing a portable service interface (22, 22a) having software for communication with an on-line center (16). *Specification*, pg. 5, Ins. 4-7. Upon connecting the portable service interface (16) to the in-field product (28, 30, 32, 34), the method electronically connects the on-line center (16) with the portable service interface (22, 22a), and, from the portable service interface (22, 22a), selects at least one servicing function (96, 98) available from the on-line center (16) resulting in at least one of the following: (A) interfacing the in-field product (28, 30, 32, 34) with the on-line center (16) through the portable service interface (22, 22a) to conduct a diagnostic evaluation (110) of the in-field product (28, 30, 32, 34), and (B) downloading information (120) to the in-field product (28, 30, 32, 34) from the on-line center (16) through the portable service interface (22, 22a). *Id.* Ins. 7-13. Finally, the method displays one of the diagnostic evaluation (114) and the downloaded information (120) on the portable service interface (22, 22a) as a result of the selecting step. *Id.*, Ins. 13-15.

6. **GROUND OF REJECTION:**

Claims 1-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Jago et al. (USP 5,938,607) in view of Wood et al. (USP 5,715,823). Claims 1-24 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Slayton et al. (USP 5,938,607) in view of Jago et al., further in view of Friz et al. (USP 5,786,994). Claims 1-24 are also provisionally rejected under the judicially created doctrine of double patenting over claims 1-44 of U.S. Application Ser. No. 09/199,506.

7. **ARGUMENT:**

**Rejection under 35 U.S.C §103(a) over Jago et al. in view of Wood et al.**

The Examiner rejected claims 1-24 under 35 U.S.C. § 103(a) as being unpatentable over Jago et al. in view of Wood et al. As the Board is well aware, the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *MPEP §2142*. To establish a *prima facie* case of obviousness, three basic criteria must be met. *Id.* First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the

reference or to combine reference teachings; second, there must be a reasonable expectation of success; and finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *Id.* MPEP §2142 further requires that “[t]he teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.” *Id.* citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes each and every element of the claimed invention, but also provide “a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). That is, “[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.” *MPEP §2143.01*. “The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness.” *Id.* When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

Appellant believes that a *prima facie* case of obviousness cannot be made based on the art of record because, as will be shown below, (1) the references are directed to very different purposes and there is no motivation to combine these references in a way done so by the Examiner, other than Appellant's own teaching; (2) the combination would not have a likelihood of success, at least not of the claimed invention; and (3) all the elements of the present claims are not present in the references. The Examiner has not established any of the three basic criteria required under MPEP §2143 to sustain a §103 rejection. Appellant will now address each of the three criteria required by MPEP §2143.

**Lack of motivation to combine the references:**

The Examiner maintains that “it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Wood's teachings of ultrasound diagnostic imaging system with universal access to diagnostic information and images with the teachings

of Jago, for the purpose of enabling ultrasound systems to be accessed through an open architecture communication network, whereby image management capabilities may be provided through a conventional off the shelf personal computer with no special hardware, software, or expensive modification [see Wood, col. 1, lines 40-67 and col. 2 lines 1-11].” Appellant does not necessarily disagree that Jago et al. and/or Wood et al. disclose devices enabled for remote communication. However, that is not what is called for in the present claims. Absent Appellant’s disclosure, there is no suggestion or motivation in the art of record to combine the references in the manner done by the Examiner.

Wood et al. discloses a system which “make[s] it possible for physicians to remotely access, control, and perform diagnoses using their ultrasound systems over a network such as the World Wide Web with no special hardware requirements.” Wood et al., Abstract, (emphasis added). That is, the system of Wood et al. is disclosed as an in-field device that is readily capable of external connectivity “with no special hardware requirements.” Wood et al. further discloses that the system thereof provides that “performance enhancements are remotely transmitted and installed without the need for a serviceman’s call.” Wood et al., col. 1, lns. 12-14. That is, the system of Wood et al. is remotely operable without additional components. To conclude that one of ordinary skill in the art would combine this express disclosure with any system which includes an in-field product at a customer site that is not readily capable of direct communication with an on-line center as called for in the present claims directly contradicts the express disclosure of Wood et al. As stated in MPEP §2145.X.D.2, it is improper to combine references where the references teach away from their combination. MPEP §2145.X.D.2. Accordingly, it is improper to combine the teachings of Wood et al. with any system that is contradictory to the connectivity of the device disclosed therein. Furthermore, to allege that one of ordinary skill in the art would be motivated to modify the communicative in-field product of Wood et al. into a system which is incapable of direct communication with a remote facility, as called for in the present claims, is contrary to conventional wisdom in the art of record as evidenced by the disclosure of Jago et al.

Jago et al. is directed to imaging library data access and management. Jago et al., Abstract. Jago et al. states that “the ultrasound system 10 includes a HyperText Transfer Protocol (HTTP) server 30” and that “server 30 makes the diagnostic information of the ultrasound system 10 available to users connected to the access the ultrasound system through a communication unit.” Jago et al., col. 3, lns. 20-30. Similar to Wood et al., Jago et al. teaches an in-field product that is readily capable of remote communication to allow remote review of the images acquired by the device. Jago et al. Abstract. The Examiner’s suggestion that one of ordinary skill in the art would be motivated to combine the teaching of Jago et al.

and Wood et al. is an interpretation of the art of record that is not supported by that very art. The references lack the motivation or suggestion to combine the references in the manner done by the Examiner and actually teach away from the combination suggested by the Examiner. The only motivation to combine these references in the manner done by the Examiner has been derived from Appellant's disclosure.

The Examiner must examine the rejected claims as a whole and without the advantages of hindsight to determine if the rejected claims are obvious in light of the cited references. That is, it is improper for the Examiner to piece together the limitations of the claimed invention using the claims as a guide without providing any suggestion or motivation as to why it would have been obvious to one of ordinary skill and knowledge in the art to combine the various prior art references. As a result, a rejection of a claim under 35 U.S.C. §103(a) is improper if the claimed invention is employed as an instruction manual to combine the teachings of the prior art references so that the claimed invention is rendered obvious. Simply, "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." In Re Fritch, 972 F.2d 1260, 23 USPQ. 2d 1780, 1784 (Fed. Cir. 1992) citing In Re Fine, 837 F.2d 1071, 1075, 5 USPQ. 2d 1596, 1600 (Fed. Cir. 1988).

A review of the Background of the above-captioned Application indicates the Examiner's utilization of impermissible hindsight. As stated in the above-captioned Application, "systems may be networked to permit common management and control" and "Further, such systems may be networked with a picture archiving and communication system (PACS) for storing digitized image data for subsequent retrieval and reconstruction." Specification, pg. 1, lns. 14-17. The Specification further states that "Improvements in computer networks have greatly facilitated the task of offering assistance to medical imaging equipment" and that "[i]n particular, rather than having to call a service center and talking to a technician or engineer, or having to await a return call from the service center, network technologies have facilitated proactive techniques wherein the service center may contact the medical diagnostic equipment to check the status of subscribing equipment." Id., pg. 2, lns. 5-10. The Specification continues, "While such advancements in the provision of remote services to medical diagnostic equipment has greatly enhanced the level of service and information exchange, such advancements can only be taken advantage of by systems that are networked to the service center" and that "[n]on-externally networked medical diagnostic equipment, or systems without interactive service software resident on the in-field product at the customer site may not be able to receive service or use resources of the service center due to the inability to connect or communicate with the centralized service



facility.” *Id.*, pg. 2, ln. 22 to pg. 3, ln. 1. The Specification further states that, “for non-networked systems, there is a need to directly connect the in-field product to the on-line service center to allow the field engineers to utilize current service tools in order to bridge a customer system with the on-line service center” and that “[s]uch a system would be particularly useful for systems that do not have the requisite communication software to connect to the on-line service center directly.” *Id.*, pg. 3, lns. 10-14. “It would therefore be desirable to have a system and technique for the remote servicing of the in-field product that can communicate with diagnostic medical systems that do not have the application software that allows for communication with the remote resources such as the on-line service center”, “[i]t would also be advantageous to have a system that utilizes service tools that are already widely used by field support personnel”, and “it would also be advantageous to have a system that could receive diagnostic evaluations and data from the on-line center, even with a non-networked system.” *Id.*, pg. 3, lns. 15-21.

Both Wood et al. and Jago et al. disclose in-field devices that are configured for direct remote communication. To conclude that one of ordinary skill in the art would be motivated to sever these direct remote features is a suggestion that is diametrically opposed to the art of record. It seems apparent that the ‘motivation’ to combine the references in the manner suggested by the Examiner has been derived directly from Appellant’s disclosure. The references teach away from the claimed invention because they are already capable of direct communication. The Examiner has utilized Appellant’s own disclosure as a blue print in an attempt to derive the claimed invention from the art of record.

In as much as the art of record teaches away a system in accordance with the present claims, that modification of the references in the manner suggested by the Examiner is contrary to that specifically disclosed in the references, and that the combination of the Jago et al. and Wood et al. is the result of impermissible hindsight, the art of record does not include the motivation or suggestion to combine the references in the manner done by the Examiner.

**Lack of reasonable expectation of success:**

The second prong of the *prima facie* case for obviousness requires that the Examiner also show that if the references were combinable in a manner as suggested by the Examiner that there would be a reasonable expectation of success in arriving at the invention resulting from such a combination. The references make it clear that one skilled in the art would not be successful in arriving at the present invention by merely combining the teachings of the art of record. That is, as discussed above, the references are clear that the respective in-field devices thereof are communicatively connected directly to the remote system. Jago et al. describes in detail the benefits of the device that is configured to communicate directly with a remote system. *See Jago et al.*, col. 1, ln. 14 to col. 2 ln. 19. That is, Jago et

al. is directed to a system which allows users of the communication enabled system to access, review, and share the medical information acquired by the device. The combination suggested by the Examiner directly contradicts these disclosed benefits of the system of Jago et al.

Assuming that Wood et al. and Jago et al. were combinable, the combination of the disclosures thereof does not yield the claimed invention. The nature of both of these references is disclosed in the Background of Appellant's Application. That is, both systems include an in-field device that is readily capable of remote communication, be it with a user of the device such as a doctor in Jago et al. or with a plurality of local imaging devices as in Wood et al. These are the very systems that are addressed in the present Application as cited above and fail to resolve the issue of remote communication with devices that are not enabled for such connectivity. The combination of these systems does not resolve the updating shortfalls addressed by the presently claimed invention. The art of record discloses no more than the same problems discussed in the Background of Appellant's Application as cited above. Combining the references does not result in an in-field product at a customer site that is not readily capable of direct communication with an on-line center and at least one portable service interface operable with the in-field product at the customer site and having software for communication with the on-line center as called for in the present claims. The combination of Jago et al. and Wood et al. would simply result in an in-field device that has a redundant communication link with the remote system, each of which is a direct link. To conclude otherwise is contrary to the express disclosure of the references.

**References failure to teach or suggest each and every claim limitation:**

The burden of establishing a *prima facie* case of obviousness also requires that the prior art reference (or references when combined), teach or suggest all the claim limitations. As set forth herein below, the Examiner's combination of references also fails to satisfy this requirement.

**CLAIMS 1-9:**

In rejecting claim 1, the Examiner merely reproduced the elements of claim 1 with respect to Jago et al. and asserts that Jago et al. "teaches a system that includes an HTTP server, and a communication means ... for communicating electronic messages to and from the manufacturer" and that "Jago does not explicitly disclose as least one online center having access to service software at a centralized facility so as to service in-field product remotely." Final Office Action of October 6, 2005, ¶4. The Examiner further states that "Wood discloses at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely." Id., ¶5. Appellant respectfully disagrees.

Claim 1 calls for, in part, a remote servicing communication system for an in-field product at a customer site wherein the in-field product is not readily capable of direct communication with an online

center. That is, the in-field product is not constructed for direct communication with the online center. Contrary to the Examiner's assertion that "Jago discloses a remote servicing communications system...[having] at least one on-line center having access to service software at a centralized facility so as to service in-field product an in-field product at a customer site that is not readily capable of direct communication with the on-line center"; Jago et al. states that "[I]t should be possible for the manufacturer to deliver bulletins and reports with this type of information directly to the ultrasound system, and for the operator to quickly obtain this type of information if it is not present on the ultrasound system." Jago et al., col. 2, lns. 14-19, (emphasis added). Jago et al. further states that "[t]he ultrasound system 10 includes a HyperText Transfer Protocol (HTTP) server 30" and that "[t]he server 30 makes the diagnostic information of the ultrasound system 10 available to users connected to access the ultrasound system through a communication network, such as the network shown in FIG. 2." Id., col. 3, lns. 19-30. That is, ultrasound system 10 is readily capable of direct communication with the on-line center via server 30. The Examiner's interpretation of that which is disclosed in Jago et al. directly contradicts the disclosure of the reference.

Likewise, Wood et al., which is the parent of Jago et al., states that "[i]n accordance with the principles of the present invention the ultrasound system of FIG. 1 further includes a HyperText Transport Protocol (HTTP) server 30" and that the "[t]he HTTP server is connected to access ultrasonic images and report from the storage medium 24, and makes the system's images and reports accessible to a personal computer, terminal, or workstation at a remote location." Wood et al., col. 3, lns. 18-24. Wood et al. further states that "the server 30 makes the diagnostic information of the ultrasound system 10 available to users connected to access the ultrasound system through the communication network 340." Wood et al., col. 3, lns. 26-29. That is, Wood et al. expressly discloses that ultrasound system 10 is readily capable of direct communication with an on-line center; albeit not a service center but an image library.

Claim 1 calls for, in part, an in-field product at a customer site that is not readily capable of direct communication with an on-line center. As both Jago et al. and Wood et al. disclose an ultrasound system which includes a server which "makes the system's images and reports accessible to a personal computer, terminal, or workstation at a remote location", the systems disclosed in Wood et al. and Jago et al. are systems readily capable of direct communication with an on-line center and are not systems which are not readily capable of direct communication with an on-line center as called for in claim 1.

Claim 1 further calls for a first communications link connecting a portable service interface to the on-line center and a second communication link connecting the portable service interface with the in-field product to complete a connection between the in-field product and the on-line center through the portable

service interface. The Examiner asserts that “Wood discloses at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely (Wood teaches a cable is connected from the serial port of the laptop computer to the serial port on the ultrasound system as well as further teaching new techniques for qualifying and testing such software upgrades for ultrasonic diagnostic systems worldwide), [citation omitted]” Final Office Action of October 6, 2005, ¶5. The Examiner’s analysis fails to identify the elements of the claim with respect to the art of record. Such a comparison cannot be made because the elements are not there.

In addition to server 30 configuring the in-field product for direct communication with the on-line center, Wood et al. discloses that “the Perform System Diagnostics functions can be performed by an on-site serviceman using a laptop computer.” Wood et al., col. 11, lns. 10-12. Wood et al. further states that “when the serviceman is with the ultrasound system, there is no need for modem interconnection; the network link can be made directly” and that “in this case a cable is connected from the serial port 131 of the laptop computer (FIG. 3) to the serial port 31 of the ultrasound system (FIG. 2).” Wood et al., col. 11, lns. 12-16. Wood et al. continues stating that “access and interrogation of the ultrasound system by the repairman proceeds as described above, but at the much faster data rate of a direct network connection” and that “a visiting serviceman can use his laptop computer to perform system diagnostics, check error logs, verify configurations and software levels, and other system maintenance and repair activities.” Wood et al., col. 11, lns. 17-24.

In the configuration of Wood et al., when a serviceman uses a laptop to service the in-field device, there is a single communications link between the laptop and the in-field product. Data is exchanged via the direct network connection; i.e. the physical connection between the laptop and the in-field product. As such, there is no connection between the in-field product and the on-line center through a portable service interface as called for in claim 1. Wood et al. expressly states such. Simply, the repairman has physically brought the service to the in-field device and the service is therefore no-longer “remote”.

With respect to the failure of Jago et al. and/or Wood et al. to teach or suggest a system as called for in claim 1, the Examiner maintains that “it is the position of the Examiner that the Applicant is arguing a feature that one of ordinary skill had deemed obvious” and that “since the laptop of Woods [sic] has both Ethernet as well as serial connection[;] [i]t would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have allowed for the laptop to be able to transmit and receive information from the on-line center when connect to the ultra sound system.” Final Office Action of December 6, 2005; ¶37. The Examiner’s statement indicates the Examiner’s disregard for the

disclosure of the art of record and the Examiners' responsibilities relative thereto. The Examiner queried, "Is applicant claiming that the novelty of their invention [is] the ability of one system to serve as interface for another system when the ultra [sic: ultrasound system] is not presently connected to the system?" and "if so, the Examiner strongly disagrees with this interpretation." *Id.* The claims do not, as the Examiner has apparently reduced the interpretation thereof, merely call for "the ability of one system to serve as an interface when an ultrasound is not presently connected to the system".

The claims call for a specific set of elements and specify the association of those elements. The Examiner has merely removed each of the individual elements from the context of the claims and alleged that those elements are disclosed in the art of record and the claimed elements and the claimed association of the elements would have been obvious. Such a conclusion is not supported by the art of record as cited above and requires complete disregard for all that is disclosed in the references and is contrary to the procedures set forth in the MPEP. In essence, the Examiner has reduced the claims to a plurality of independent and isolated elements and to what the Examiner considers the "gist of the invention." This is an insupportable interpretation of the claims and an insupportable interpretation of the references. The Examiner's interpretation of the references is simply beyond the disclosure of those references. The claims call for a plurality of elements and the relationship of those elements. The art of record discloses systems which not only lack the features called for in the claims, but teach away from that which is claimed. For all the reasons set forth above, Appellant believes that which is called for in claim 1 is patentably distinct over the art of record. As claims 2-9 depend from a claim which is believed to be allowable, Appellant believes claims 2-9 are also in condition for allowance pursuant to the chain of dependency.

#### CLAIMS 10-20:

Claim 10 calls for, in part, a method of providing remote service communication between an on-line center and an in-field product wherein the in-field product is not readily capable of direct communication with the online center. Claim 10 further calls for electrically connecting the on-line center with a portable service interface, accessing data from the in-field product with the portable service interface, and interfacing between the on-line center and the in-field product with the portable service interface. The combination of Jago et al. and Wood et al. fails to teach, suggest, or disclose such a method. That is, as argued above with respect to claim 1, the systems of both Jago et al. and Wood et al. are readily capable of direct communication with the on-line center. The Examiner's suggestion of what the references disclose directly contradicts the actual disclosure of the references. Furthermore, Wood et al. discloses that "access and interrogation of the ultrasound system by the repairman proceeds...at the

much faster data rate of a direct network connection” when the laptop computer is connected thereto. Wood et al., col. 11, lns. 17-21.

The system of Wood et al. is configured to communicate data between the network either through direct connection with the in-field device and the on-line center or through a non-remote direct connection of a laptop computer with the in-field product. Wood et al. expressly discloses as much. That is not what is called for in claim 10. Claim 10 calls for, in part, interfacing between the on-line center and the in-field product with the portable service interface. Such interfacing is not taught, suggested, or disclosed in Jago et al. or Wood et al., individually or in combination. Wood et al. discloses that the in-field product either communicates directly with the on-line center or, alternatively, that the information communicated from the center is brought to the in-field product via a laptop computer. Neither configuration of the system of Wood et al. teaches, suggests, or discloses interfacing between the on-line center and the in-field product with the portable service interface as called for in claim 10. As such, Jago et al. and Wood et al. fail to teach and/or suggest each and every element called for in claim 10. Accordingly, Appellant believes claim 10 is patentably distinct over Jago et al. in view of Wood et al. Furthermore, as claims 11-20 depend from a claim otherwise believed to be allowable, Appellant believes claims 11-22 are also in condition of allowance pursuant to the chain of dependency.

CLAIMS 21-24:

Similarly, claim 21 defines a method of servicing an in-field product not readily capable of direct communication with the remote on-line center. The Examiner rejected claim 21 in a manner similar to that of claims 1 and 10. That is, the Examiner reproduced the elements of the claim and directed Appellant’s attention to the rejection of claims 1 and 10 and alleged other claimed features as inherent without further support. Final Office Action October 6, 2005, ¶26. The method of claim 21 includes selecting at least one of (A) interfacing the in-field product with the on-line center through the portable service interface to conduct a diagnostic evaluation of the in-field product and (B) downloading information to the in-field product from the on-line center through the portable service interface. No such servicing method is disclosed in the art of record. The art of record fails to teach or suggest such a servicing method. Jago et al. teaches an in-field product that is readily capable of direct communication with a remote on-line center and further discloses that “the electronic messaging system can be configured to automatically capture system information when a problem occurs, such as the system error log, status and configuration, and to automatically send the error log to the manufacturer or repairman at the time of the problem.” Jago et al., col. 8, lns. 15-19. Jago et al. further states that “the manufacturer or repairman can review these messages and their information as they are received, and can notify the

system operator if the information indicates that repairs or adjustments are needed to the ultrasound system.” *Id.*, col. 8, lns. 19-23. Jago et al. continues that “the manufacturer can contact the ultrasound system operator by return electronic message or other mediura to request additional information if such appears warranted or useful.” *Jago et al.*, col. 8, lns. 23-26. That is, the system of Jago et al. is directly connectable to an on-line center and there is no remote servicing of the in-field as called for in claim 21. The system of Jago et al. merely communicates error messages between the in-field product and the on-line center. The system of Jago et al. does not teach or suggest connecting a portable service interface to an in-field product, or electrically connecting the on-line center with the portable service interface as called for in claim 21. The conclusion that Jago et al. discloses a system as presently claimed is irreconcilable with the express disclosure of Jago et al.

Similarly, as argued above with respect to claims 1 and 10, Wood et al. also discloses a system wherein the in-field product is readily capable of direct communication with a remote on-line center. Wood et al. further discloses that the system disclosed therein communicates with a service provided via (1) an on-line support connection directly between the in-field product and the on-line center or (2) a laptop computer connected directly to the in-field product. That is, Wood et al. does not disclose a servicing method including providing a portable service interface having software for communication with an on-line center, connecting the portable service interface to the in-field product, and electrically connecting the on-line center with the portable service interface as called for in claim 21. That is, Wood et al. discloses a system wherein direct connections are maintained either between a laptop computer and the in-field product or an on-line service and the in-field product. Neither embodiment disclosed in Wood et al. includes a portable service interface which interconnects the in-field product and the on-line center as called for in claim 21. The Examiner’s interpretation of that which is disclosed in the art of record directly contradicts the disclosure of the references. The art of record simply does not teach or suggest each and every element as called for in the claims and the Examiner’s conclusion that the references teach or suggest each and every element called for in the claims directly contradicts the disclosure of the references as argues above. Accordingly, Appellant believes that which is called for in claim 21 is patentably distinct over Jago et al. in view of Wood et al. Furthermore, as claims 22-24 depend from a claim otherwise believed to be allowable, Appellant believes claims 22-24 are also in condition for allowance at least pursuant to the chain of dependency.

**Rejection under 35 U.S.C. §103(a) over Jago et al. in view of Friz et al.**

The Examiner rejected claims 1-24 “under 35 U.S.C. §103(a) as being unpatentable over Slayton et al. Jago et al. (Jago), U.S. Patent No. 5,938,607 in view of Friz et al. (Friz), U.S. Patent No. 5,786,994.” Final Office Action of October 6, 2005, ¶30. Appellant submitted a §1.131 Declaration with the Response of July 20, 2004 which overcame the previous rejections based on Slayton et al. The Examiner acknowledged as much in the Office Action of May 19, 2005 wherein the Examiner acknowledges that “Applicant states that the Slayton reference (U.S. Patent No. 6,440,071) is not prior art based upon the evidence provided with the 37 CFR 1.131 declaration filed 20 July 2004” and that “with regards to Applicant’s stated [sic], the examiner agrees with applicant.” Office Action of May 19, 2005, ¶¶36, 37. Accordingly, the outstanding rejection is based on Jago et al. and Friz et al.

**Lack of motivation to combine the references:**

In rejecting claims 1-24 as unpatentable over Jago et al. view of Friz et al. the Examiner again reproduced the language of the claims in an effort to satisfy the burden of the establishing a *prima facie* obviousness rejection and again the Examiner has disregarded the disclosure of the references. The Examiner states that “Jago does not explicitly disclose at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely.” The Examiner further states that “in the same field of endeavor, Friz et al. discloses...at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely....” Final Office Action of December 6, 2005, ¶32. Appellant finds the Examiner’s assertion that Friz et al. is “in the same field of endeavor as applicant’s invention” misrepresentative of that which is disclosed in Friz et al.

The presently claimed invention is related to servicing of in-field image acquisition devices. Friz et al. is directed to a laser printer array system connected to a plurality of medical imaging devices. Friz et al., Abstract. That is, the system of Friz et al. is a printer array that is connected to a medical imaging system. Whereas Jago et al. discloses a system that allows remote access to the images acquired by the device, Friz et al. is directed to a printer array that is connected to the image acquiring device. The hardcopy communication system of Friz et al. is an alternative to the electrically communicative system of Jago et al. That is, while Jago et al. teaches the remote access to the images of the medical imaging device, Friz et al. teaches a method of networking a plurality of printing devices connected to the medical imaging system. Unlike the presently claimed invention, Friz et al. is directed to a system that is connectable therewith.

Friz et al. is directed to a laser printer array system connected to a plurality of medical imaging devices. Friz et al., Abstract. That is, Friz et al. is directed to a printer control system wherein



Appellant's claimed invention is directed to the imaging devices which may be connected to the system of Friz et al. to generate a printout. As stated in the Examiner's citation to Friz et al. column 1, line 11 through column 2, line 67, Friz et al. states that "in many medical imaging systems, the laser imager receives image data from a plurality of diagnostic imaging modalities" and that "the modalities often are associated with specific departments within a hospital that send image data to one or more central laser imagers." Friz et al., col. 2, lns. 47-53. Friz et al. further states that the hospital may "charge for use of both the laser imager and imaging media on a departmental basis...." Friz et al., col. 2, lns. 53-54. That is, the laser imaging system of Friz et al. is operable with a system of Jago et al. or Wood et al. Any such combination would result in a medical imaging system connected to a medical image printing system. Servicing the printing system of Friz et al. has no applicability to the system service of the medical devices connected thereto. Friz et al. states that "the software system can be configured to automatically send the reports to users of the laser imagers, automatically initiate and order to send additional imaging media, and automatically initiate a request for dispatch of a service technician in response to an error condition." Friz et al., col. 3, lns. 37-42. That is, the system of Friz et al. does not provide service to an in-field product as called for in the present claims, but merely acquires data therefrom and dispatches service personnel responsive thereto. Combining the system of Friz et al. with Jago et al. results in a system wherein the imaging system of Jago et al. is connected to a laser medical imager system of Friz et al. The system of Friz et al. does not service, update, or communicate other than to receive data from the imaging system of Jago et al. Any motivation to combine the systems of Jago et al. and Friz et al. adds nothing to the respective systems disclosed therein.

**Lack of reasonable expectation of success:**

As mentioned above, the presently claimed invention is related to servicing of in-field image acquisition devices. Comparatively, Friz et al. is directed to a laser printer array system connected to a plurality of medical imaging devices. Friz et al., Abstract. That is, Friz et al. is directed to a printer control system wherein Appellant's invention is directed to the imaging devices which may be connected to the system of Friz et al. to generate a printout. As stated in the Examiner's citation to Friz et al. column 1, line 11 through column 2, line 67, Friz et al. states that "in many medical imaging systems, the laser imager receives image data from a plurality of diagnostic imaging modalities" and that "the modalities often are associated with specific departments within a hospital that send image data to one or more central laser imagers." Friz et al., col. 2, lns. 47-53. Friz et al. further states that the hospital may "charge for use of both the laser imager and imaging media on a departmental basis...." Id., col. 2, lns. 53-54. That is, the laser imaging system of Friz et al. is operable with a system of Jago et al. or Wood et

al. Any such combination would result in a medical imaging system connected to a medical image printing system. Servicing the printing system of Friz et al. has no applicability to the system service of the medical devices connected thereto. Friz et al. states that “the software system can be configured to automatically send the reports to users of the laser imagers, automatically initiate and order to send additional imaging media, and automatically initiate a request for dispatch of a service technician in response to an error condition.” Friz et al., col. 3, lns. 37-42. That is, the system of Friz et al. does not provide service to an in-field product as called for in the present claims, but merely acquires data therefrom and dispatches service personnel responsive thereto. Combining the system of Friz et al. with Jago et al. results in a system wherein the imaging system of Jago et al. is connected to a laser medical imager system of Friz et al. The system of Friz et al. does not service, update, or communicate other than to receive data from the imaging system of Jago et al. The disclosure of Friz et al. does not overcome the shortcomings of Jago et al, Wood et al., or any combination thereof, to achieve a system as called for in the present claims. Accordingly, even should Jago et al. and Friz et al. include a motivation to combine the references in the manner suggested by the Examiner, that combination is unable to result in the presently claimed invention.

**References failure to teach or suggest each and every claim limitation:**

**CLAIMS 1-9:**

In rejecting claim 1 as unpatentable over Jago et al. in view of Friz et al., the Examiner has again reproduced the entirety of claim 1 and further asserts that Jago et al. implies generating and communicating error logs as well as reporting image data in the form of an electronic message from the ultrasound scanner to its manufacturer and in response, the manufacturer returning an electronic message to the respective ultrasound scanner. Final Office Action of December 6, 2005, ¶31. As argued above, the system of Friz et al. is directed to a printer array connected to an imaging system. Appellant’s invention is related to servicing of in-field image acquisition devices. Claim 1 calls for, in part, a remote servicing communication system for in-field product which includes an on-line center having access to service software at a centralized facility to service the in-field product remotely, an in-field product at the a customer site that is not readily capable of direct communication with the online center, and at least one portable service interface operable with the in-field product at the customer site. There is no disclosure in the art of record to service an in-field medical device as defined by claim 1.

Friz et al. is directed to a laser printer array system connected to a plurality of medical imaging devices. Friz et al., Abstract. Friz et al. is directed to a printer control system wherein Appellant’s invention is directed to the imaging devices which may be connected to the system of Friz et al. to

generate a printout. Friz et al. states that “in many medical imaging systems, the laser imager receives image data from a plurality of diagnostic imaging modalities” and that “the modalities often are associated with specific departments within a hospital that send image data to one or more central laser imagers.” Friz et al., col. 2, lns. 47-53. Friz et al. states that “the software system can be configured to automatically send the reports to users of the laser imagers, automatically initiate and order to send additional imaging media, and automatically initiate a request for dispatch of a service technician in response to an error condition.” Friz et al., col. 3, lns. 37-42. That is, if the printer system is inoperable, the printer system requests a service call. The system of Friz et al. does not provide service to an in-field product as called for in the present claims, but merely acquires data therefrom and dispatches service personnel responsive thereto. Combining the system of Friz et al. with Jago et al. results in a system wherein the imaging system of Jago et al. is connected to a laser medical imager system of Friz et al. The system of Friz et al. does not service, update, or communicate other than to receive data from the imaging system of Jago et al.

Friz et al. further states that “system 46 is capable of automatically sending the reports to users of laser imagers 14<sub>1</sub>-14<sub>N</sub>, automatically initiating an order to send additional imaging media 22, and automatically initiating a request for dispatch of a service technician in response to an error condition.” Friz et al., col. 11, lns.12-16. That is, if an error message is sent, service is merely dispatched, nothing is sent from a remote source as called for in the present claims. There is no disclosure in the art of record for at least one on-line center having access to service software that centralizes the facility so as to service in-field product remotely as asserted by the Examiner. That is, Friz et al. discloses “dispatch of a service technician” in response to an error condition and Jago et al. merely teaches generation of a “system error log”. Neither system teaches, suggests, or discloses, remote service of an in-field product as called for in the present claims and the Examiner’s conclusion that such disclosure exists is beyond the express disclosure of the references.

Claim 1 calls for, in part, an in-field product at a customer site that is not readily capable of direct communication with an on-line center, at least one portable service interface operable with the in-field product at the customer site and having software for communication with the on-line center, a first communications link connecting the portable service interface to the on-line center, and a second communications link connecting the portable service interface with the in-field product to complete a connection between the in-field product and the on-line center through the portable service interface. As argued above with respect to the rejection of claim 1 over the combination of Jago et al. in view of Wood et al., Jago et al. fails to teach, suggest, or disclose a remote servicing communication system for in-field

product as defined in claim 1. The addition of Friz et al., a printer control protocol, does not overcome this shortfall of Jago et al.

The in-field products in both Jago et al. and Friz et al. are readily capable of direct communication with an on-line center, the references fail to teach, suggest, or disclose a first communications link connecting the portable service interface to an on-line center, and fail to teach, suggest, or disclose, a second communications link connecting the portable service interface with the in-field product to complete a connection between the infield product and the on-line center through the portable service interface as called for in claim 1. As such, Appellant believes claim 1 is patentably distinct over the combination of Jago et al. in view of Friz et al. Furthermore, as claims 2-9 depend from claim 1, Appellant believes claims 2-9 are also in condition for allowance as depending from a claim otherwise believed to be allowable.

#### CLAIMS 10-20:

The Examiner rejected claim 10 as unpatentable over Jago et al. in view of Friz et al. without reference to any of the elements called for in claim 10. Final Office Action of December 6, 2005, ¶¶30-34. As such, hereunder Appellant has identified those elements called for in claim 10 which are not taught or suggested in the art of record. Claim 10 defines a method providing remote service communication between an on-line center and an in-field product at a customer site wherein the in-field product is not readily capable of direct communication with the on-line center. Claim 10 further defines loading on-line center connectivity software on a portable service interface, connecting the portable service interface to the in-field product, electrically connecting the on-line center with the portable service interface, accessing data from the in-field product with the portable service interface, and interfacing between the on-line center and the in-field product with the portable service interface. That is, claim 10 defines an interstitial element, the portable service interface, which facilitates communication between a device that is not readily capable of direct communication with a remote system and the remote system.

As argued above with respect to the rejection of claim 10 as unpatentable over Jago et al. in view of Wood et al., Friz et al. adds nothing to the disclosure of the servicing of the in-field product of Jago et al. That is, the system of Friz et al. is a printer system connectable to the in-field product system of Jago et al. Such a system does not teach, suggest, or disclose the method of remote service called of in claim 10. As argued above, with respect to claim 1, the system of Friz et al. fails to provide any service other than to dispatch a service technician to the products connected thereto and Jago et al. merely communicates error messages between the in-field product and the on-line center. Furthermore, as argued above with respect to the rejection of claim 10 as unpatentable over Jago et al. in view of Wood et al. and

the rejection of claim 1 as unpatentable over Jago et al. in view of Friz et al., none of the art of record teaches or suggests a method of servicing an in-field product that is not readily capable of direct communication with a remote facility as called for in claim 10. The Examiner's conclusions regarding that which is disclosed in the art of record is either beyond the disclosure of the art of record or directly contradicts that which is disclosed therein. Accordingly, Appellant believes claim 10 is patentably distinct over the combination of Jago et al. in view of Friz et al. Furthermore, as claims 11-20 depend from claim 10, Appellant believes claims 11-20 are also in condition for allowance pursuant to the chain of dependency.

CLAIMS 21-24:

Again the Examiner simply rejected claim 21 as unpatentable over Jago et al. in view of Friz et al. without addressing that which is called for in the claim as compared to the art of record. Final Office Action of December 6, 2005, ¶¶30-34. Accordingly, Appellant has hereunder identified those features called for in the claims with are not taught or suggested in the art of record. Claim 21 calls for a method of servicing an in-field product not readily capable of direct communication with a remote on-line center including providing a portable service interface having software for communication with an online center, connecting the portable service interface to the in-field product, electrically connecting the on-line center with the portable service interface and, from the portable service interface, selecting at least one servicing function available from the on-line center. As previously argued with respect to claims 1 and 10, the Examiner's assertion that "Friz discloses at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely" is simply not supported by the art of record. Specifically, Friz et al. expressly discloses "initiating a request to dispatch a service technician in response to an error condition." Friz et al., col. 11, lns. 15-16. That is, the printer of Friz et al. is not serviceable by the on-line center as called for in claim 21. Jago et al. discloses a system wherein the system is readily capable of direct communication with the remote on-line center. Furthermore, the in-field product of Jago et al. is configured to communicate "system error log, status and configuration, and to automatically send the error log to the manufacturer or repairman at the time of the problem." Jago et al., col. 8, lns. 17-19. That is, the system of Jago et al. does not service the in-field product, but rather merely records the problem therewith. The combination of Jago et al. with Friz et al. results in an in-field product system readily capable of direct communication with the remote on-line center wherein the on-line center can report and dispatch service technicians to the in-field product combined with the printer system of Friz et al. wherein service personnel must be dispatched responsive to an error message. That is not what is called for in claim 21. Claim 21 calls for a method of servicing an in-field product that is

not readily capable of direct communication with a remote on-line center. Claim 21 further calls for providing a portable service interface having software for communication with an online center, connecting the portable service interface to the in-field product, electrically connecting the on-line center with the portable service interface and, from the portable service interface, selecting at least one servicing function available from the on-line center. The combination of Jago et al. with Friz et al. requires the dispatch of service personnel to the systems thereof. Such is clearly not what is called for in claim 21. As such, Appellant believes claim 21 is patentably distinct over thereover. Furthermore, as claims 22-24 depend from a claim otherwise believed to be in condition for allowance, Appellant believes claims 22-24 are also in condition for allowance pursuant to the chain of dependency.

**Provisional double patenting rejection over U.S. Application Ser. No. 09/199,506**

Appellant notes that the Examiner provisionally rejected claims 1-24 under the judicially created doctrine of double patenting over claims 1-44 of Application No. 09/199,506. MPEP §804(I)(B) states that “[i]f the ‘provisional’ double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent.” Since no sustainable basis of rejection is believed to exist, and U.S. Ser. No. 09/199,506 has not issued as a patent, Appellant requests withdrawal of the provisional double patenting rejection and a timely issuance of a Notice of Allowance for claims 1-24.

8. **CONCLUSION**

In view of the above remarks, Appellant respectfully submits that claims 1-24 are patentably distinct over the art of record. Accordingly, Appellant requests that the Board direct that each of the outstanding rejections be withdrawn and that the present Application proceed to issuance.

**General Authorization for Extension of Time**

In accordance with 37 C.F.R. §1.136, Appellant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefore. Appellant hereby authorizes charging of deposit account no. 50-2402 for the \$500.00 fee for filing this Appeal Brief Under 37 C.F.R. §1.17(c).

Respectfully submitted,

/Timothy J. Ziolkowski/

Timothy J. Ziolkowski  
Registration No. 38,368  
Phone 262-268-8181  
tjz@zpspatents.com

Respectfully submitted,

/Kevin R. Rosin/

Kevin R. Rosin  
Registration No. 55,584  
Phone 262-268-8100 ext. 15  
krr@zpspatents.com

Dated: December 20, 2006  
Attorney Docket No.: GEMS8081.022

**P.O. ADDRESS:**

Ziolkowski Patent Solutions Group, SC  
136 South Wisconsin Street  
Port Washington, WI 53074  
262-268-8100

**CLAIMS APPENDIX**

1. (Original) A remote servicing communication system for in-field product comprising:  
at least one on-line center having access to service software at a centralized facility so as to service in-field product remotely;  
an in-field product at a customer site that is not readily capable of direct communication with the on-line center;  
at least one portable service interface operable with the in-field product at the customer site and having software for communication with the on-line center;  
a first communications link connecting the portable service interface to the on-line center;  
and  
a second communications link connecting the portable service interface with the in-field product to complete a connection between the in-field product and the on-line center through the portable service interface.
2. (Original) The system of claim 1 wherein the connection between the in-field product and the on-line center is utilized to conduct a diagnostic evaluation of the in-field product.
3. (Original) The system of claim 1 wherein the in-field product is a medical image scanner and the on-line center contains service software designed for utilization with a wide variety of medical image scanners, and wherein after the portable service interface sends a data message identifying the medical image scanner, the on-line center selects service software based on the medical image scanner identification and automatically downloads the selected service software to the medical image scanner or executes the selected service software from the portable service interface.
4. (Original) The system of claim 1 wherein the connection between the in-field product and the on-line center is utilized to access data from the on-line center.
5. (Original) The system of claims 4 wherein the accessed data from the on-line center includes at least one of a configuration file, a golden file, a protocol and a software program.



6. (Original) The system of claim 1 wherein the portable service interface sends a data message signal to the on-line center identifying the in-field product such that the on-line center selects service software specifically designed for the in-field product.

7. (Original) The system of claim 1 wherein the second communication link connecting the portable service interface to the in-field product is one of a serial cable and a local area network cable.

8. (Original) The system of claim 1 wherein the portable service interface is a laptop computer having loaded therein remote resource communications software to automatically communicate with the on-line center and transfer data therebetween.

9. (Original) The system of claim 1 wherein the connection to the on-line center provides access to a remote on-line support engineer to provide real time assistance with the in-field product through the portable service interface.

10. (Original) A method of providing remote service communication between an on-line center and an in-field product at a customer site wherein the in-field product is not readily capable of direct communication with the on-line center comprising:

- loading on-line center connectivity software on a portable service interface;
- connecting the portable service interface to the in-field product;
- electronically connecting the on-line center with the portable service interface;
- accessing data from the in-field product with the portable service interface; and
- interfacing between the on-line center and the in-field product with the portable service interface.

11. (Original) The method of claim 10 further comprising the steps of transmitting data identifying the in-field product to the on-line center for evaluating and servicing the in-field product, and automatically selecting service software at the on-line center, and generating in-field product evaluation information and displaying the in-field product evaluation information on the portable service interface.

12. (Original) The method of claim 10 wherein the interfacing step includes accessing data from the on-line center including at least one of a configuration file, a golden file, a protocol and a software program.

13. (Original) The method of claim 10 wherein the in-field product is a medical image scanner and further comprises automatically selecting at the on-line center service software based on a specific identification of the medical image scanner.

14. (Original) The method of claim 10 further comprising the step of automatically checking whether a field service engineer requests an analysis/evaluation, and if so, transmitting system data to the in-field product and performing an analysis/evaluation of the in-field product.

15. (Original) The method of claim 14 further comprising displaying results of the analysis/evaluation so that the field service engineer can monitor the analysis/evaluation.

16. (Original) The method of claim 10 wherein the connecting step further includes connecting the portable service interface to the in-field product by one of a serial cable and a local area network cable.

17. (Original) The method of claim 10 further comprising the steps of automatically checking to see whether a field service engineer requests access to remote resource information, and if so, downloading the remote resource information to the in-field product.

18. (Original) The method of claim 17 further comprising the step of displaying a remote resource information to the in-field service engineer.

19. (Original) The method of claim 10 wherein the electronically accessing step occurs through a global computer network system.

20. (Original) The method of claim 10 wherein the electronically connecting step further includes providing access to a remote on-line support engineer to provide real time assistance with the in-field product through the portable service interface.

21. (Previously Presented) A method of servicing an in-field product not readily capable of direct communication with a remote on-line center comprising:

- providing a portable service interface having software for communication with an on-line center;
- connecting the portable service interface to the in-field product;
- electronically connecting the on-line center with the portable service interface;
- from the portable service interface, selecting at least one servicing function available from the on-line center resulting in at least one of the following:
  - (A) interfacing the in-field product with the on-line center through the portable service interface to conduct a diagnostic evaluation of the in-field product; and
  - (B) downloading information to the in-field product from the on-line center through the portable service interface; and
- displaying one of the diagnostic evaluation and the downloaded information on the portable service interface as a result of the selecting step.

22. (Original) The method of claim 21 wherein the in-field product is a medical image scanner and further comprising the steps of transmitting a data message identifying the medical image scanner from the portable service interface to the on-line center, automatically selecting service software at the on-line center based on the medical image scanner identification, and automatically downloading the selected service software to the medical image scanner.

23. (Original) The method of claim 21 further comprising the steps of automatically checking whether a field service engineer requests an analysis/evaluation, and if so, transmitting system data to the in-field product and performing an analysis/evaluation of the in-field product, and displaying results of the analysis/evaluation so that the field service engineer can monitor the analysis/evaluation.

24. (Original) The method of claim 21 further comprising the steps of automatically checking to see whether a field service engineer requests access to remote resource information, and if so, downloading the remote resource information to the in-field product, and displaying a remote resource information to the in-field service engineer.

**EVIDENCE APPENDIX**

-- None --

**RELATED PROCEEDINGS APPENDIX**

-- None --